

## **DIVISION OF FIRE SAFETY**

OFFICE OF THE STATE FIRE MARSHAL, STATE FIRE ACADEMY AND THE STATE HAZ-MAT TEAM

## FIRE SAFETY NEWS



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## Upcoming Board meetings

Electrical Board Meeting: April 7, 2015, 9AM

Elevator Board Meeting: April 14, 2015 9AM

#### Access Board:

April 27, 2015, 1:30PM May 18, 2015, 1:30PM

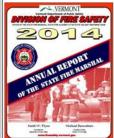
Plumbing Board Meeting: May 12, 2015, 9AM

BlazeMaster® fire sprinkler systems are the most specified non-metallic sprinkler system option in the world.

## **April 2015**

## **2014 Report of the State Fire Marshal Released**

Michael Desrochers, Executive Director



The Division of Fire Safety is required to submit the Annual Report of the State Fire Marshal to the Vermont Legislators. This year we dedicated the report to Robert Patterson, former Deputy Director for his dedication and devotion to protecting Vermonters for over 32 years. Robert was an expert at conflict resolution and was well known for his ability to treat everyone



with the highest level of respect and professionalism. Robert retired from service on August 29, 2014.

To view the full report, click here.

The Report of the State Fire Marshal is a statewide statistical analysis capturing fire and emergency incidents, fire protection efforts, fire investigation, fire service training, hazardous material response and public education efforts. Data collected is evaluated and may necessitate adjustments in our fire safety public education efforts, code enforcement, building inspection, licensing, certification, fire service training, fire investigation, resource allocation, establishing priorities and recognizing to make modifications to our Vermont Fire and Building Safety Code.

Highlights from the 2014 report continued on next page

## **Upcoming DFS Trainings**

There is an upcoming Training on BlazeMaster Sprinkler Systems on May 20, 2015 at the Central Office of the Division of Fire Safety in Berlin. Training will begin at 9am.

Find out more at http://www.lubrizol.com/CPVC/Products/BlazeMaster.html

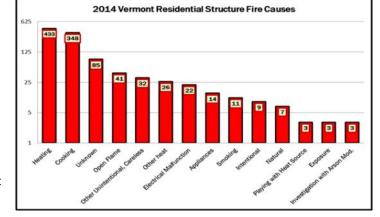






#### Highlights from the 2014 report include:

- Vermont fire departments reported responses to over 45,000 emergency incidents.
- 85.4% of Vermont Fire Departments reported incidents to the NFIRS in 2014
- Residential properties account for the majority of Vermont structure fires and civilian fatalities.



- Heating appliance fires in Vermont continue to be the leading cause of structure fires. The leading factor contributing to home heating fires was failure to clean creosote from solid-fueled heating equipment chimneys.
- Over the last 4 years 68% of Vermont's fire deaths have been seniors over the age of 60.
- Young children were at greater risk of home fire death in the past than they are today. Vermont has not had a child die in a fire since 2005.
- Vermont has not had a on-duty firefighter death since 2010

Through joint fire safety efforts we continue to see a trend in the reduction of fires and fatalities in 2014 compared to prior years. We would like to thank the men and women of the Vermont fire service for their diligence and commitment to the citizens of Vermont. While you and I applaud their bravery, our greater responsibility in honoring their service and keeping them safe lies in taking the proper steps to prevent these fires from happening in the first place ... because Fire is Everyone's Fight.

The significant gains we have made would not be possible without support from the Commissioner, Administration, Legislature, division staff. and the Vermont Fire Service. I encourage everyone to read the report, and if in the future, you feel we can improve this please send your comments to Micheal Greenia at micheal.greenia@state.vt.us

# Combustion Air for Oil Appliances (Excerpts from NFPA 31)

Adequate air for combustion and ventilation of fuel burning appliances is critical to prevent carbon monoxide formation and insure proper operation of all fuel burning appliances. This segment examines the specific requirements for oil-fired appliances found in the 2011 edition of NFPA 31, the Standard for Installation of Oil-Burning Appliances.

Chapter 5 addresses air for combustion and ventilation, and directs that 'appliances *SHALL* be installed in locations where available ventilation permits satisfactory combustion of oil, proper venting of combustion gases, and maintenance of safe ambient temperatures under normal conditions of use' (Section 5.2.1).

Chapter 5 defines two types of appliance installations- in unconfined spaces and confined spaces. An unconfined space is one that provides not less than 50 cubic feet per 1000 BTU/hour of aggregate input rating of all fuel burning appliances in the space. It further states that in buildings of conventional frame, brick or stone construction, the required air for ventilation and combustion can be considered adequate from normal infiltration (Section 5.3.1).

# Combustion Air for Oil Appliances (Excerpts from NFPA 31)

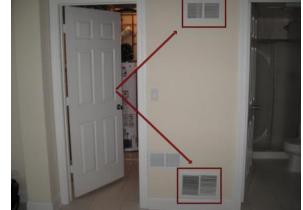
Where normal infiltration is not sufficient because of tight, energy efficient construction, air *SHALL* be obtained directly from outdoors by means of a permanent opening or openings having a total free area of not less than 1 square inch per 5000 Btu/hour of total input rating (Section 5.3.2).

Section 5.4 considers appliances in confined spaces, and gives three methods of supplying adequate air: air from inside; air from outside; and ventilation air from inside and combustion air from outside.

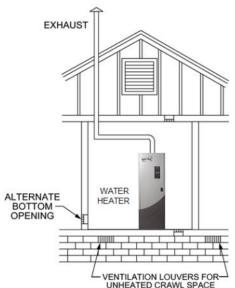
Where air is provided from inside the building, the space the air is being derived from must meet

the requirements of an unconfined space. This is typically seen where an appliance is enclosed in a mechanical room within a larger space, and requires two openings, one near the top, and one near the bottom of the confined space, each with a free area of not less than 1 square inch per 1000 Btu/hour of total input rating (Section 5.4.1.2).

Where air is provided from outside the building, there must be two permanent openings to the outside, providing 1 square inch per 4000 Btu/hour of total input rating when using vertical ducts (Section 5.4.2.3); and 1 square inch per 2000 Btu/hr of total input rating when using horizontal ducts (Section 5.4.2.4).



A hybrid arrangement allows ventilation air to be provided from outside the confined space through two openings complying with Section 5.4.1, and one opening communicating directly to the outdoors, or to spaces such as an attic or crawl space that com-



municates directly with the outdoors and has a free area of not less than 1 square inch per 5000 Btu/hour of total input rating (Section 5.4.3).

It is also important to consider the blocking effect of louvers or grates on the free area of the ducts or openings. Wooden louvers can reduce the effective free area by 75 to 80%, while metal grates can restrict the free area by 25 to 40% (Section 5.6.3).

The impact of other appliances, such as clothes dryers, exhaust fans, kitchen hoods or fireplaces must also be considered, as they can contribute to unsatisfactory operation of an oil-fired appliance (Section 5.7).

Lastly, the size of combustion air openings required by Sections 5.3 and 5.4 do not govern when specially engineered methods meeting the approval of the Authority Having Jurisdiction and providing

adequate ventilation and combustion are provided (Section 5.8).

#### Submitted by

Bruce Martin, Regional Manager/Springfield

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# Safety

There's nothing like outdoor grilling. It's one of the most popular ways to cook food. But, a grill placed too close to anything that can burn is a fire hazard. They can be very hot, causing burn injuries. Follow these simple tips and you will be on the way to safe grilling.

#### SAFETY TIPS

- Propane and charcoal BBQ grills should only be used outdoors.
- The grill should be placed well away from the home, deck railings and out from under eaves and overhanging branches.
- Weep children and pets at least three feet away from the grill area.
- Weep your grill clean by removing grease or fat buildup from the grills and in trays below the grill.
- Never leave your grill unattended.
- Always make sure your gas grill lid is open before lighting it.

#### **CHARCOAL GRILLS**

- There are several ways to get the charcoal ready to use. Charcoal chimney starters allow you to start the charcoal using newspaper as a fuel.
- If you use a starter fluid, use only charcoal starter fluid. Never add charcoal fluid or any other flammable liquids to the fire.
- Weep charcoal fluid out of the reach of children and away from heat sources.
- There are also electric charcoal starters, which do not use fire. Be sure to use an extension cord for outdoor use.
- When you are finished grilling, let the coals completely cool before disposing in a metal container.

## NEPA

Your Source for SAFETY Information

▲ NFPA Public Education Division • 1 Batterymarch Park, Quincy, MA 02169

## PROPANE Grills

Check the gas tank hose for leaks before using it for the first time each year. Apply a light soap and water solution to the hose. A propane leak will release bubbles. If your grill has a gas leak, by smell or the soapy bubble test, and there is no flame, turn off the gas tank and grill. If the leak stops, get the grill serviced by a professional before using it again. If the leak does not stop, call the fire department. If you smell gas while cooking, immediately get away from the grill and call the fire department. Do not move the grill.

If the flame goes out, turn the grill and gas off and wait at least 15 minutes before re-lighting it.

#### FACTS

- July is the peak month for grill fires.
- Roughly half of the injuries involving grills are thermal burns.



www.nfpa.org/education

#### VT HAZMAT TEAM NOTES



Christopher Herrick, Chief

#### Is Your Department Ready?

Your pager goes off and you are called to a vehicle crash with HAZMAT involved, or a report of a strange odor and people sick, or a carbon monoxide detector sounding or an unknown purple liquid running down the street. Are you ready to begin managing this incident safely?

The first step in successful management of HAZMAT events in your community is ensuring all first responders have the appropriate level of training. In addition to training all the first responder organizations: fire, police and EMS should meet to establish communications plans, areas of responsibility and to identify areas of concern and perform necessary planning. Planning should also include any other groups that might be affected such as schools, local government and nearby medical facilities.

When the incident occurs the fire department should consider the following:

Approach from the upwind upgrade side if possible
Has an Incident Command System been established?
Is the Command Post in a safe area?
Is there an immediate life safety concern?
Establish control zones
How many victims are there?
Is EMS on scene and do we have adequate EMS assets?
Is there a need to evacuate or shelter in place
Do I need 'emergency' decontamination
Can we identify the product?
Shipping papers
Placards

Shape of container

Description of product from witnesses or victims

Do we need assistance from the State HAZMAT Team -1-800-641-5005

Is the product moving? Can we contain it?

Do we have the training and equipment?

Where will it go if we do not stop it?

Do I need Town Highway to bring resources?

**Road blocks** 

Sand

Heavy equipment

Does electricity need to be cut? (When flammable vapors are present)

It is important to note that if you need assistance from the HAZMAT Team you should use the HAZMAT Hotline - 1-800-641-5005. Assistance ranges from a consultation with a Crew Chief to a full team response depending on the need. The HOTLINE is the way to get help in an emergency!

One last reminder: Any spill should be reported through the hotline!

If you have any non-emergency HAZMAT questions or suggestions please contact me.

Christopher Herrick, Chief VHMRT 802-479-7586



State of Vermont Dept of Public Safety

## **fision of Fire Safety**

www.firesafety.vermont.gov

#### CALENDAR OF

April 2015						
SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Date	Event	Location		
7	Electrical Board Meeting	BERLIN		
14	Elevator Board Meeting	BERLIN		
27	Access Board Meeting	BERLIN		

#### ~BOARD DEADLINE REMINDER~

If you have a board agenda item, it needs to be received at the Central Office no later than 2 weeks prior to the board meeting. (for all boards - Access, Electrical, Elevator & Plumbing)



#### ~ NATIONAL EVENTS ~

April 3, 2015 ~ Good Friday April 4, 2015 ~ Passover

April 5, 2015 ~ Easter April 22, 2015 ~ Earth Day April 22, 2015 ~ Administrative Professionals Day

May 2015						
SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30



Date	Event	Location	
12	Plumbing Board	BERLIN	
18	Access Board	BERLIN	
25	Memorial Day ~ State Offices Closed	ALL	



#### ~ NATIONAL EVENTS ~

May 10, 2015 ~ Mother's Day

May 16, 2015 ~ Armed Forces Day May 18, 2015 ~ Victoria Day

May 25, 2015 ~ Memorial Day



State of Vermont Division of Fire Safety
1311 US Route 302—Berlin Suite 600
Barre, VT 05641-2351

FIRESAFETY.VERMONT.GOV

To be added to the monthly newsletter email mailing list contact the Central Office (802) 479-7561

## REMEMBER .... Smoke Detectors, Fire Sprinklers and Carbon Monoxide Detectors Save Lives

**Vermont Department of Public Safety** 

## Division of Fire Safety

#### **Central Office**

1311 US Route 302— Suite 600 Barre, VT 05641-2351 Phone (802) 479-7561 Fax (802) 479-7562 Toll Free (800) 640-2106 HAZMAT Response Team Phone (802) 479-7586 Fax (802) 479-7562 Toll Free (800) 641-5005

#### Vermont Fire Academy

93 Davison Drive Pittsford, VT 05763 Phone (802) 483-2755 Fax (802) 483-2464 Toll Free (800) 615-3473

#### **Regional Offices:**

#### Barre

1311 US Route 302— Suite 500 Barre, VT 05641-7301 Phone (802) 479-4434 Fax (802) 479-4446 Toll Free 1-888-870-7888

#### Springfield

100 Mineral Street, Suite 307 Springfield VT 05156-3168 Phone (802) 885-8883 Fax (802) 885-8885 Toll Free 1-866-404-8883

#### Rutland

56 Howe Street, Building A-Suite 200 Rutland, VT 05701 Phone (802) 786-5867 Fax (802) 786-5872 Toll Free (888) 370-4834

#### Williston

372 Hurricane Lane, Suite 102 Williston, VT 05495-7151 Phone (802) 879-2300 Fax (802) 879-2312 Toll Free (800) 366-8325

#### DIVISION OF STATE POLICE—FIRE INVESTIGATION